



IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-4 (canceled).

Claim 5 (currently amended): An ~~The~~ antireflection film of ~~claim 2~~, which comprises

a high refractive index layer formed of a first coating composition in the cured state wherein said first coating composition primarily comprises (A) metal oxide fine particles comprising at least one oxide selected from the group consisting of titanium oxide, aluminum oxide, zirconium oxide, cerium oxide, iron oxide, tin oxide, and compound oxides thereof, wherein said metal oxide has an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and

a low refractive index layer formed of a second coating composition in the cured state wherein said second coating composition primarily comprises (D) silica-base inorganic oxide fine particles having void in the interior and having an average particle size of 1 to 500 nm, and ~~wherein said component~~ (C) is a compound having at least two 3,4-epoxycyclohexyl groups in a molecule,

wherein said high refractive index layer and said low refractive index layer are successively stacked.

Claim 6 (currently amended): An ~~The~~ antireflection film of ~~claim 2~~, which comprises

a high refractive index layer formed of a first coating composition in the cured state wherein said first coating composition primarily comprises (A) metal oxide fine particles comprising at least one oxide selected from the group consisting of titanium oxide, aluminum oxide, zirconium oxide, cerium oxide, iron oxide, tin oxide, and compound oxides thereof, wherein said metal oxide has an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and

a low refractive index layer formed of a second coating composition in the cured state wherein said second coating composition primarily comprises (D) silica-base inorganic oxide fine particles having void in the interior and having an average particle size of 1 to 500 nm, and ~~wherein said component (C) is (C)~~ a silicone compound which contains at least two $-R^1CH_3SiO-$ units, wherein R^1 is a substituent group which contains a 3,4-epoxycyclohexyl group, said silicone compound having a molecular weight of 500 to 2,100 and an epoxy equivalent of 180 to 270, and being free of an alkoxy group,

wherein said high refractive index layer and said low refractive index layer are successively stacked.

Claim 7 (canceled).

Claim 8 (currently amended): An ~~The antireflection film of claim 2, which~~ comprises

a high refractive index layer formed of a first coating composition in the cured state wherein said first coating composition primarily comprises (A) metal oxide fine particles comprising at least one oxide selected from the group consisting of titanium oxide, aluminum oxide, zirconium oxide, cerium oxide, iron oxide, tin oxide, and compound oxides thereof,

wherein said metal oxide has an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and

a low refractive index layer formed of a second coating composition in the cured state wherein said second coating composition primarily comprises (D) silica-base inorganic oxide fine particles having void in the interior and having an average particle size of 1 to 500 nm, and (C) a compound having in a molecule at least two groups of at least one type selected from the group consisting of an epoxy and oxetane group,

wherein said each of the first and second coating compositions further comprising (G)
a photoacid generator (G) ~~has~~ having the formula: $R^4_2I^+X^-$ wherein R^4 is $-C_6H_4-R^5$, R^5 is an alkyl group having at least 6 carbon atoms, and X^- is SbF_6^- , AsF_6^- , PF_6^- , BF_4^- , HSO_4^- , ClO_4^- , Cl^- or $CF_3SO_3^-$,

wherein said high refractive index layer and said low refractive index layer are successively stacked.

Claims 9-10 (canceled).

Claim 11 (previously presented): A method for preparing an antireflection film-bearing article, which comprises:

applying a first coating composition which primarily comprises (A) metal oxide fine particles comprising at least one oxide selected from the group consisting of titanium oxide, aluminum oxide, zirconium oxide, cerium oxide, iron oxide, tin oxide, and compound oxides thereof, wherein said metal oxide has an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and/or (C) a compound

having in a molecule at least two groups of at least one type selected from the group consisting of an epoxy and oxetane group, and (E) a radical initiator and optionally (F) a first solvent onto at least one surface of a substrate, to obtain a coating of said first coating composition;

irradiating said coating of said first coating composition with actinic energy radiation to form a first cured film;

applying a second coating composition which primarily comprises (D) silica-base inorganic oxide fine particles having void in the interior and having an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and/or (C) a compound having in a molecule at least two groups of at least one type selected from the group consisting of an epoxy and oxetane group, and (G) a photoacid generator and optionally (H) a second solvent onto said first cured film, to obtain a coating of said second coating composition; and

irradiating said coating of said second coating composition with actinic energy radiation to form a second cured film.

Claim 12 (previously presented): A method for preparing an antireflection film-bearing article, which comprises:

applying a second coating composition which primarily comprises (D) silica-base inorganic oxide fine particles having void in the interior and having an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and/or (C) a compound having in a molecule at least two groups of at least one type selected from the group consisting of an epoxy and oxetane group, and (G) a photoacid generator and

optionally (H) a second solvent onto one surface of a temporary substrate optionally having a strippable layer formed thereon, to obtain a coating of said second coating composition;

irradiating said coating of said second coating composition with actinic energy radiation to form a second cured film;

applying a first coating composition which primarily comprises (A) metal oxide fine particles comprising at least one oxide selected from the group consisting of titanium oxide, aluminum oxide, zirconium oxide, cerium oxide, iron oxide, tin oxide, and compound oxides thereof, wherein said metal oxide has an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and/or (C) a compound having in a molecule at least two groups of at least one type selected from the group consisting of an epoxy and oxetane group, and (E) a radical initiator and optionally (F) a first solvent onto said second cured film, to obtain a coating of said first coating composition;

irradiating said coating of said second coating composition with actinic energy radiation to form a first cured film, and to obtain a laminate;

attaching said laminate to a substrate using an adhesive or pressure-sensitive adhesive; and

stripping said temporary substrate.

Claim 13 (previously presented): A laminate, which is prepared by

applying a second coating composition which primarily comprises (D) silica-base inorganic oxide fine particles having void in the interior and having an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and/or (C) a compound having in a molecule at least two groups of at least one type selected

from the group consisting of an epoxy and oxetane group, and (G) a photoacid generator and optionally (H) a second solvent onto one surface of a temporary substrate optionally having a strippable layer formed thereon, to obtain a coating of said second coating composition;

irradiating said coating of said second coating composition with actinic energy radiation to form a second cured film;

applying a first coating composition which primarily comprises (A) metal oxide fine particles comprising at least one oxide selected from the group consisting of titanium oxide, aluminum oxide, zirconium oxide, cerium oxide, iron oxide, tin oxide, and compound oxides thereof, wherein said metal oxide has an average particle size of 1 to 500 nm, and (B) a compound having in a molecule at least one group of at least one type selected from the group consisting of an acrylic, methacrylic, vinyl and styryl group, and/or (C) a compound having in a molecule at least two groups of at least one type selected from the group consisting of an epoxy and oxetane group, and (E) a radical initiator and optionally (F) a first solvent onto the second cured film, to obtain a coating of said first coating composition;

irradiating said coating with actinic energy radiation to form a first cured film; and forming an adhesive or pressure-sensitive adhesive layer on said first cured film.

Claims 14-16 (canceled).

Claim 17 (currently amended): ~~An~~ The antireflection film-bearing article of claim 10, wherein said component (C) is a compound having at least two 3,4-epoxycyclohexyl groups in a molecule having an antireflection film of claim 5 formed on at least one surface of a substrate.

Claim 18 (currently amended): An The antireflection film-bearing article of claim 10, wherein said component (C) is a silicone compound which contains at least two $-R^1CH_2SiO-$ units, wherein R^1 is a substituent group which contains a 3,4-epoxycyclohexyl group, said silicone compound having a molecular weight of 500 to 2,100 and an epoxy equivalent of 180 to 270, and being free of an alkoxy group having an antireflection film of claim 6 formed on at least one surface of a substrate.

Claim 19 (currently amended): An The antireflection film-bearing article of claim 10, wherein said photoacid generator (G) has the formula: $R^4_2I^+X^-$ wherein R^4 is $-C_6H_4-R^5$, R^5 is an alkyl group having at least 6 carbon atoms, and X^- is SbF_6^- , AsF_6^- , PF_6^- , BF_4^- , HSO_4^- , ClO_4^- , Cl^- or $CF_3SO_3^-$ having an antireflection film of claim 8 formed on at least one surface of a substrate.